

Portland Harbor Superfund Site
Draft Feasibility Study

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Portland Harbor Superfund Site

- Nearly \$100 million for studies, investigation, and data analysis over 10 years
- Early cleanups have occurred in some areas
- Sampling results through 2010
- EPA will determine final cleanup

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What we know

- Contamination generally higher in deeper sediments than surface layer
- Contamination generally higher near shore than in navigation channel
- Natural recovery occurring mainly because cleaner sediment from upriver is moving into the harbor

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What we know

- Sediments contaminated mainly from historical use of river
- The potential risk from four chemical groups generally overlap the risks from other chemicals
- Those four chemical groups are:
 - PCBs
 - Dioxins/furans
 - The pesticide DDT and its related breakdown products
 - PAHs (polycyclic aromatic hydrocarbons)

- Contaminants also exist upstream

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Surface Sediment PCBs

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What we know

- Risk mostly from regularly eating local fish (bass, carp)
- No significant risk from swimming or beach use and eating migrating fish (salmon)

- Health advisories on fish consumption throughout all of Willamette River and not just Portland Harbor

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Draft Feasibility Study Options

- Eleven alternatives
- No Action (required by law to evaluate)
- 5 are removal focused (dredging)
- 5 are integrated (still involve significant dredging)

- Assumes sources will be controlled

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Remedial Action Levels ♀

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Sediment Cleanup Areas K:\LWG\2012\Executive Summary\Final Assets\Figure 10.jpg

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Draft Feasibility Study Options

- All adequately reduce risks to human health and environment (except the No Action Alternative)
- Differences - cleanup action levels, active cleanup time, impacts, use of technology, and cost

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Cleanup Methods

Combinations of methods used in different areas of the Site

- Dredging
- Capping
- Treatment - in place or after dredging
- Innovative Technologies
- Monitored Natural Recovery
- Enhanced Monitored Natural Recovery

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Alternatives ♀

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blank base slide 1

slide2 Bi

slide3 Br

slide4 Ci

slide5 Cr
slide6 Di
slide7 Dr
slide8Ei
slide9Er
slide10Fi
slide11Fr

PCB Sediment Concentration Over Time ♀

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Sediment Cleanup Areas K: \LWG\2012\Executive Summary\Final Assets\Figure 10.jpg

Total Site: 2,172 Acres ♀

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Superfund Cleanup Criteria

2 Threshold

- Protect human health and the environment
- Comply with federal and state laws

5 Balancing

- Long-term effectiveness and permanence
- Reduce toxicity, mobility or volume through treatment
- Short-term effectiveness
- Implementability
- Cost

2 modifying

- State acceptance
- Community acceptance

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Alternatives Comparison without line
with line

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Best Scoring Alternatives ♀

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Next Steps

- EPA reviews draft Feasibility Study
- EPA prepares Proposed Plan
- Public Comment on Proposed Plan
- EPA issues Record of Decision
- Agreements for cleanup implementation
- Sources controlled
- Cleanup actions begin
- Monitoring over many years

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Contacts

- EPA

–www.epa.gov/region10/portlandharbor

- LWG

–www.lwgportlandharbor.org

- Portland Harbor CAG

–www.portlandharborcag.info

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